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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,535	01/23/2004	Sang Woon Suh	1740-000043/US	2581

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EXAMINER

COLEMAN, VANESSA V

ART UNIT	PAPER NUMBER
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2627

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/762,535	Applicant(s) SUH ET AL.	
	Examiner Vanessa (Brandi) Coleman	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims *See #6 for claim list.*

- 4) ☒ Claim(s) ~~1-70~~ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,14-16,18-20,28-30,32-34,42,57,58,60-62 and 70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments, see pages 11-13, filed August 13, 2007, with respect to the rejection(s) of claim(s) 1-67 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Minamino et al., US Patent Publication No 2003/0007432.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4, 6, 18, 20, 32, 34, 60, and 62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In each of the claims, applicant references a "PIC data area" of a Blu-Ray Disc. Because applicant has capitalized the first letters of the phrase "Blu-Ray Disc," the examiner asserts that applicant is referencing the trademarked Blu-Ray Disc. Regarding the use of trademarks in a claim, MPEP 2173.05(u) states "If the trademark or trade name is used in a claim as a

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limitation to identify or describe a particular material or product, the claim does not comply with the requirements of the 35 U.S.C. 112, second paragraph. Ex parte Simpson, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. In fact, the value of a trademark would be lost to the extent that it became descriptive of a product, rather than used as an identification of a source or origin of a product. Thus, the use of a trademark or trade name in a claim to identify or describe a material or product would not only render a claim indefinite, but would also constitute an improper use of the trademark or trade name."

As a result of the claims being rendered indefinite by the use of the trademark Blu-Ray Disc, the examiner is left to assert that applicant only intends to claim a particular area of the optical recording medium when referencing the "permanent information & control (PIC) data area."

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4-6, 15, 16, 18-20, 29, 30, 32-34, 57, 58, and 60-62 are rejected under 35 U.S.C. 102(b) as being ~~obvious~~ anticipated by Minamino et al., US Patent Publication No. 2003/0007432 (hereafter "Minamino").

Regarding Claim 1, Minamino discloses a computer-readable recording medium (See [0392] – [0408]; Fig. 36, "optical disk medium") comprising: an information area (recording surface 401), the information area including a first region for a main data (user data area), and a second region for control information which controls recording or reproduction of the main data (lead-in area), said control information being encoded in wobbled pattern ([0395]), wherein said control information is recorded by bi-phase modulation method in such a manner that bit 0 and bit 1 are determined respectively depending on a transition in a direction within a predetermined period ([0402] – [0403]).

Regarding Claim 2, Minamino discloses the recording medium according to claim 1, wherein said control information is recorded in a lead- in zone of the information area of the recording medium ([0395]).

Regarding Claim 4, Minamino discloses the recording medium according to claim 2, wherein said control information is recorded in a particular data area of the lead-in

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zone of the computer-readable recording medium ([0400], control information elements 1505).

Regarding Claim 5, Minamino discloses the recording medium according to claim 4, wherein the bit 0 is represented by the transition from low to high, while the bit 1 is represented by the transition from high to low (Fig. 37A, where the wobble of the bit "0" transitions from low to high beginning at the far left, and the wobble of the bit "1" transitions from high to low beginning at the far right).

Regarding Claim 6, Minamino discloses the recording medium according to claim 1, wherein said control information is recorded in a particular data area of the information area of the computer-readable recording medium as part of disc information or independent of the disc information ([0400], control information elements 1505; where the limitation is met in that the control information elements are recorded independent of disc information, since the limitation includes "or").

Regarding method claims 15, 16, and 18-20 which are drawn to the method of using the corresponding product claimed in claims 1, 2, and 4-6, the method claims 15, 16 and 18-20 correspond to product claims 1, 2, and 4-6 and are rejected for the same reasons of anticipation as used above.

Regarding method claims 29, 30, and 32-34 which are drawn to the method of using the corresponding product claimed in claims 1, 2, and 4-6, the method claims 29, 30 and 32-24 correspond to product claims 1, 2, and 4-6 and are rejected for the same reasons of anticipation as used above.

Regarding Claim 57, Minamino discloses an apparatus for reproducing data from a recording medium (see [0408] – [0413]; Fig. 39, optical disk read/write drive), comprising: a signal detector to detect control information ([0409], read signal processing section 802) which controls reproduction of a main data, to reproduce the data, the control information being encoded in wobbled pattern ([0395]), said control information being encoded by bi- phase modulation method in such a manner that bit 0 and bit 1 are determined respectively depending on a transition in a direction within a predetermined period ([0403]); and a signal processor, coupled to the signal detector, to decode the control information by a demodulation method ([0410], control information element detecting section 812).

Regarding Claim 58, Minamino discloses the apparatus according to claim 57, wherein said control is recorded in a lead-in zone of the information area of the recording medium ([0395]), and wherein the signal detector detects the control information in tile lead-in zone ([0410]).

Regarding Claim 60, Minamino discloses the apparatus according to claim 58, wherein said control information is recorded in a particular data area of the computer-readable recording medium ([0395]).

Regarding Claim 61, Minamino discloses the apparatus according to claim 60, wherein the bit 0 is represented by the transition from low to high, while the bit 1 is represented by the transition from high to low (Fig. 37A, where the wobble of the bit "0" transitions from low to high nearest the far left of the wobble, and the wobble of the bit "1" transitions from high to low nearest the far right of the wobble).

Regarding Claim 62, Minamino discloses the apparatus according to claim 57, wherein said control information is recorded in a particular data area as part of disk information or independent of the disc information ([0400], control information elements 1505; where the limitation is met in that the control information elements are recorded independent of disc information, since the limitation includes "or").

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 14, 28, 42 and 70 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Minamino et al., US Patent Publication No. 2003/0007432 (hereafter

"Minamino"), in view of Gotoh et al. US Patent Publication No. 2002/0089920 (hereafter

"Gotoh").

Regarding Claim 14, Minamino discloses the recording medium according to claim 1.

Minamino does not disclose the recording medium wherein the information area further includes a third region storing identification information to identify the presence or absence of the control information, where said identification information is encoded in wobbled pattern by bi-phase modulation. Gotoh et al. discloses a computer-readable recording medium including control information recorded in a control data area (Fig. 30A and 30C), and a particular region containing identification information to identify the presence or absence of the control information (Fig. 30A, stripe presence/absence identifier 937; [0242]-[0245]) for the purpose of monitoring the amount of available space to which more control data may be recorded. Therefore, it would have been

obvious to one of ordinary skill in the art to include the identification information to identify the presence or absence of the control information, the motivation being to improve the recording operation of the control information. Also, because the control information of Minamino is encoded by bi-phase modulation, it would have been obvious to one of ordinary skill in the art to encode identification information using the same recording format.

Regarding claims 28 and 42 which are drawn to the method of using the corresponding product claimed in claim 14, the method claims 28 and 42 correspond to the product claim 14 and are rejected for the same reasons of obviousness as used above.

Regarding Claim 70, Minamino discloses the apparatus according to claim 57.

Minamino does not disclose that the signal processor identifies the presence or absence of the control information based on identification information, said identification information being encoded in wobbled pattern by bi-phase modulation. Gotoh et al. discloses a computer-readable recording medium including control information recorded in a control data area (Fig. 30A and 30C), and a particular region containing identification information to identify the presence or absence of the control information (Fig. 30A, stripe presence/absence identifier 937; [0242]-[0245]) for the purpose of monitoring the amount of available space to which more control data may be recorded. Therefore, it would have been obvious to one of ordinary skill in the art to include the

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identification information to identify the presence or absence of the control information, the motivation being to improve the recording operation of the control information, which would then be identified by the signal processor. Also, because the control information of Minamino is encoded by bi-phase modulation, it would have been obvious to one of ordinary skill in the art to encode identification information using the same recording format.

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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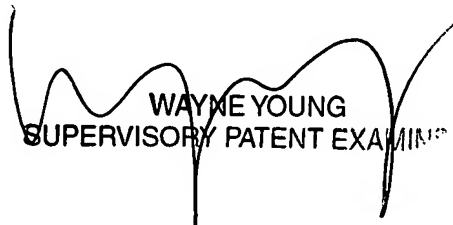
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanessa (Brandi) Coleman whose telephone number is (571) 272-9081. The examiner can normally be reached on Mon-Thurs 8:30-6; 1st Fri off, 2nd Fri 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vanessa (Brandi) Coleman
Art Unit 2627

VC


WAYNE YOUNG
SUPERVISORY PATENT EXAMINER